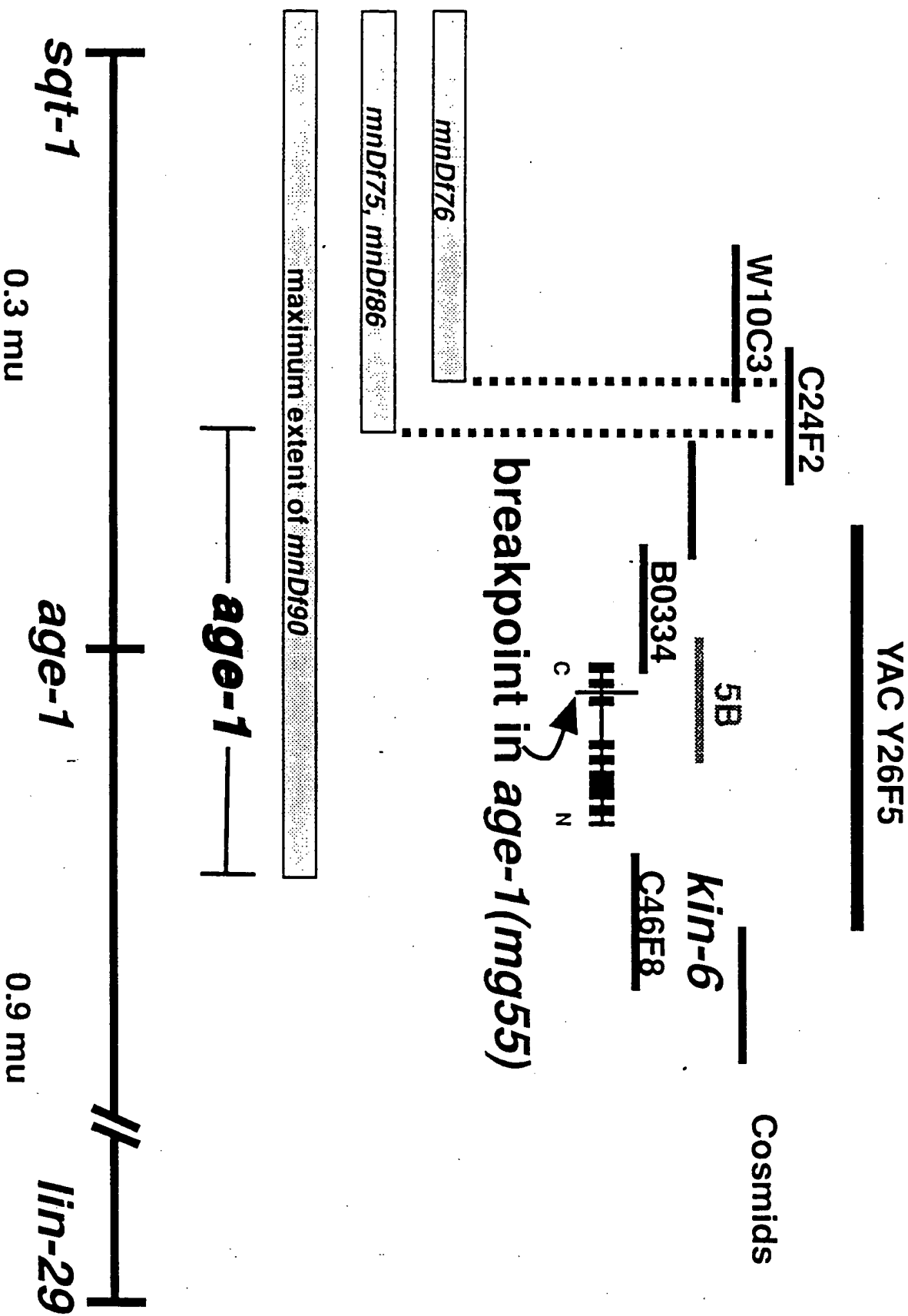


089084 genotype

FIG. 1

Map of the *age-1* Region



08908453.080797
FIG. 2A

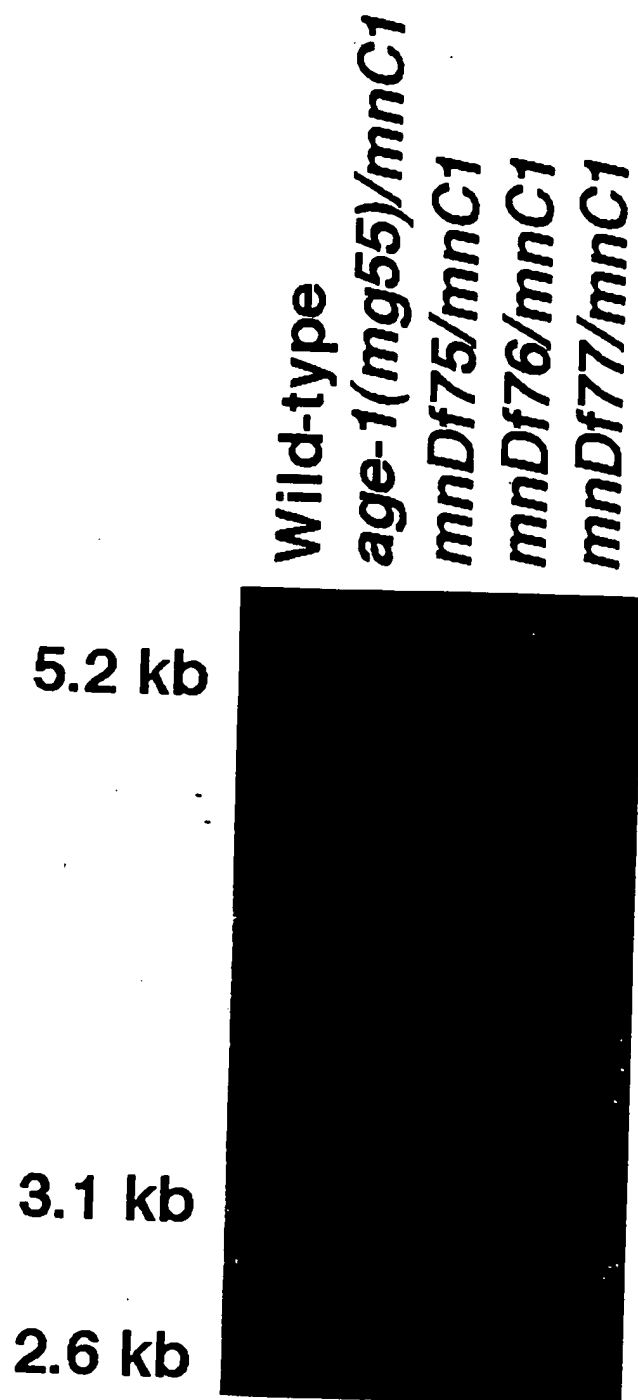


FIG. 2 B

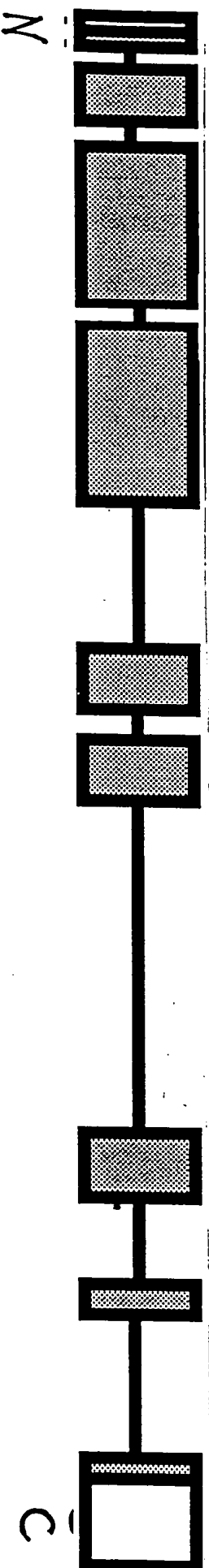
Structure of age-1

$\frac{C}{R}$ $\frac{C}{B}$ $\frac{C}{B}$
 ●

A

A A

A



Ø5B

B0334

500 bp

*mg yib.

(SEQ ID NO:2)

1 cggaagccat ggagctcgag atctgattgc tggacacgga cggaactccg acgtatctcg
61 cagatgcatg ttaacatttt acatccacaa ctgcaaacga tggctcgagca gtggcaaagt
121 cgagaacgcc catcgctgga gaccgagaat ggcaaaggat cgctgctcct ggaaaatgaa
181 ggtgtcgagc atatcatcac tatgtgtcca ttcggagaag ttattagtgt agtatttccg
241 tggtttcttg caaatgtgag aacatcgcta gaaatcaagc tatcagattt caaacatcaa
301 cttttcgaat tgattgctcc gatgaagtgg ggaacatatt ccgtaaagcc acaggattat
361 gtgttcagac agttgaataa tttcggcgaa attgaagtta tatttaacga cgatcaaccc
421 ctgtcgaaat tagagctcca cggcactttc ccaatgcttt ttctctacca acctgatgga
481 ataaacaggg ataaagaatt aatgagtgat ataagtcatt gtctaggata ctactggat
541 aaactggaag agagcctcga tgaggaactc cgtcaatttc gtgcttctct ctgggctcgt
601 acgaagaaaa cgtgcttgac acgtggactt gagggtagca gtcactacgc gttccccgaa
661 gaacagtact tgtgtgttgg tgaatcgtgc ccgaaagatt tggaaatcaa agtcaaggct
721 gccaaagtga gttatcagat gttttggaga aaacgtaaag cggaaatcaa tggagtgtgc
781 gagaaaatga tgaagattca aattgaattc aatccgaacg aaactccgaa atctctgctt
841 cacacgtttc tctacgaaat gcgaaaattg gatgtatacg ataccgatga tcttcagat
901 gaaggatggg ttcttcaatt ggctggacgt accacgtttg ttacaaatcc agatgtcaaa
961 cttacgtctt atgatggtgt ccgttcggaa ctggaaagct atcgatgccc tggattcgtt
1021 gttcgcgcgac aatcactagt cctcaaagac tattgtcgcc caaaaccact ctacgaacca
1081 cattatgtga gagcacacga acgaaaactt gctctagacg tgctcagcgt gtctatagat
1141 agcacaccaa aacagagcaa gaacagtgc atggttatga ctgattttcg tccgacagct
1201 tactcaaac aagtttact ttgggacctt gacgcgaatc ttatgatacg gcctgtgaat
1261 atttctggat tcgatttccc ggccgacgtg gatatgtacg ttcgaatcga attcagtgt
1321 tatgtgggga cactgacgct ggcacaaaaa tctacaacaa aagtgaatgc tcaatttgca
1381 aaatggaata aggaaatgta cacttttgat ctatacatga aggatatgcc accatctgca
1441 gtactcagca ttcgtgtttt gtacggaaaa gtgaaattaa aaagtgaaga attcgaagtt
1501 ggttgggtaa atatgtccct aaccgattgg agagatgaac tacgacaagg acaattttta
1561 ttccatctgt gggctcctga accgactgcc aatcgtagta ggatcggaga aaatggagca
1621 aggataggca ccaacgcagc gggttacaatt gaaatctcaa gttatgggtg tagagtctga
1681 atgccgagtc aaggacaata cacatatctc gtcaagcacc gaagtacttg gacggaaact
1741 ttgaatatta tgggtgatga ctatgagtcg tgtatcagag atccaggata taagaagctt
1801 cagatgcttg tcaagaagca tgaatctgga attgtattag aggaagatga acaacgtcat
1861 gtctggatgt ggaggagata cattcaaaag caggagcctg atttgctcat tgtgctctcc
1921 gaactcgcac ttgtgtggac tgatcgtgag aacttttccg agctctatgt gatgcttgaa
1981 aaatggaac cgccgagtgt ggcagccgcg ttgactttgc ttggaaaacg ttgcacggat
2041 cgtgtgattc gaaagtgtgc agtgagaaag ttgaatgagc agctgagccc ggtcacattc
2101 catcttttca tattgcctct catacaggcg ttgaagtacg aaccgcgtgc tcaatcggaa
2161 gttggaatga tgctcttgac tagagctctc tgcgattatc gaattggaca tcgacttttc
2221 tggctgctcc gtgcagagat tgctcgtttg agagattgtg atctgaaaag tgaagaatat
2281 cgccgtatct cacttctgat ggaagcttac ctccgtggaa atgaagagca catcaagatc
2341 atcacccgac aagttgacat ggttgatgag ctcacacgaa tcagactct tgtcaaagga
2401 atgcaaaaag atgttgctac gatgaaactg cgtgacgagc ttcgatcgat tagtcataaa
2461 atggaaaata tggattctcc actggatcct gtgtacaaac tgggtgaaat gataatcgac
2521 aaagccatcg tcttaggaag tgcaaaacgt ccgttaatgc ttcactggaa gaacaaaaat
2581 ccaaagagtg acctgcacct tccgttctgt gcaatgatct tcaagaatgg agacgatctt
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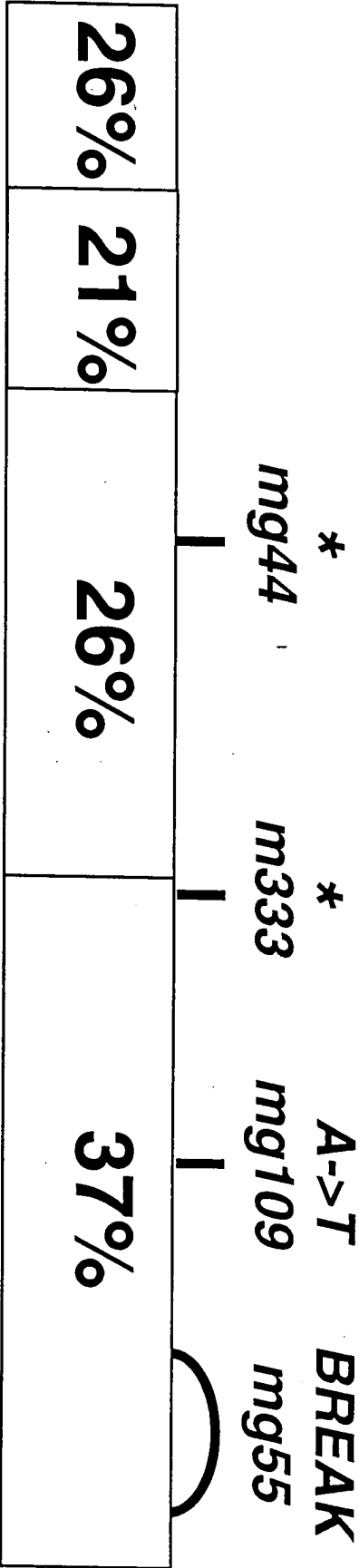
Figure 4 (Sheet 1 of 2)

2701 aacattgatt gctgtttgaa cccgtacgca gttcttccaa tgggagaaat gattggaatt
 2761 attgaagttg tgccctaattg taaaacaata ttcgagattc aagttggaac aggattcatg
 2821 aatacagcag ttcggagtat tgatccttcg tttatgaata agtggattcg gaaacaatgc
 2881 ggaattgaag atgaaaagaa gaaaagcaaa aaggactcta cgaaaaatcc catcgaaaag
 2941 aagattgata atactcaagc catgaagaaa tattttgaaa gtgtcgatcg attcctatac
 3001 tcgtgtgttg gatattcagt tgccacgtac ataatgggaa tcaaggatcg tcacagtgat
 3061 aatctgatgc tcaactgaaga tggaaaatat gtccacattg atttcggtca cattttggga
 3121 cacggaaaaga ccaaacttgg gatccagcga gatcgtcaac cgtttattct aaccgaacac
 3181 tttatgacag tgattcgatc gggtaaattc gtggatggaa attcgcatac gctacaaaaa
 3241 ttcaaaacgt tatgcgtcga agcctacgaa gtaatgtgga ataatcgaga tttgttcggt
 3301 tccttggttc ccttgatgct cggaatggag ttgcctgagc tgtcgacgaa agcggatttg
 3361 gatcatttga agaaaaccct cttctgcaat ggagaaagca aagaagaagc gagaaagttt
 3421 ttcgctggaa tctacgaaga agccttcaat ggatcatggt ctacaaaaac gaattggctc
 3481 ttccacgcag tcaaactacta ctga

Figure 4 (Sheet 1 of 2)

264080-5480680

AGE-1 WITH MUTATIONS AND PUTATIVE DOMAINS



p85 ras Unknown Lipid Kinase

100 a.a.

1146 AA

Fig. 5

(SEQ ID NO: 1)

1 MHVNILHPQL QTMVEQWQMR ERPSLETENG KGSLLLENEG VADIITMCPF
51 GEVISVVPFW FLANVRTSLE IKLSDFKHQL FELIAPMKWG TYSVKPQDYV
101 FRQLNNFGEI EVIFNDDQPL SKLELHGTFP MLFLYQPDGI NRDKELMSDI
151 SHCLGYSLDK LEESLDEELR QFRASLWART KKTCLTRGLE GTSHYAFPEE
201 QYLCVGESCP KDLESKVKAA KLSYQMFWRK RKAERINGVCE KMMKIQIEFN
251 PNETPKSLLH TFLYEMRKLD VYDTDDPADE GWFLQLAGRT TSVTNPDVKL
301 TSYDGVRSSEL ESYRCPGFVV RRQSLVLKDY CRPKPLYEPH YVRAHERKLA
351 LDVLSVSIDS TPKQSKNSDM VMTDFRPTAS LKQVSLWDL D ANLMIRPVNI
401 SGFDFPADVD MYVRIEFSVY VGTTLTASKS TTKVNAQFAK WNKEMYTFDL
451 YMKDMPPSAV LSIRVLYGKV KLKSEEFEEVG WVNMSLTDWR DELRQGQFLF
501 HLWAPEPTAN RSRIGENGAR IGTNAAVTIE ISSYGGRVRM PSQGQYTYLV
551 KHRSTWTETL NIMGDDYESC IRDPGYKKLQ MLVKKHESGI VLEEDEQRHV
601 WMWRRYIQKQ EPDLLIVLSE LAFVWTDREN FSLEYVMLEK WKPPSVAAAL
651 TLLGKRCTDR VIRKFAVEKL NEQLSPVTFH LFILPLIQAL KYEPRAQSEV
701 GMLLTRALC DYRIGHRLFW LLRAEIARLR DCDLKSEYR RISLLMEAYL
751 RGNEEHIIKII TRQVDMVDEL TRISTLVKGM PKDVATMKLR DELRSISHKM
801 ENMDSPLDPV YKLGEMIIDK AIVLGSARKP LMLHWKNKNP KSDLHLPFCA
851 MIFKNGDDL R QDMLVLQVLE VMDNIWKAAN IDCCLNPYAV LPMGEMIGII
901 EVVPNCKTIF EIQVGTGFMN TAVRSIDPSF MNKWIRKQCG IEDEKKKSKK
951 DSTKNPIEKK IDNTQAMKKY FESVDRFLYS CVGYSVATYI MGIKDRHSDN
1001 LMLTEDGKYV HIDFGHILGH GKTKLGIQRD RQPFILTEHF MTVIRSGKSV
1051 DGNSHELQKF KTLCEVEAYEV MWNNRDLFVS LFTLMLGMEL PELSTKADLD
1101 HLKKTLCFCNG ESKEEARKFF AGIYEEAFNG SWSTKTNWLF HAVKHY

Figure 6

26080453.030797